

What is claimed as the invention is:

1. A method for analyzing the energy content of an electrical signal for detecting voice, said method comprising the steps of:

5 (a) defining a first voltage threshold and a second voltage threshold, wherein the first threshold is greater than the second threshold;

(b) comparing the signal with the first voltage threshold and the second voltage threshold to produce a digital number representative of the signal;

(c) repeating steps (a) and (b) to produce a plurality of numbers;

10 (d) converting the plurality of numbers into a first sum; and

(e) comparing the first sum to a third threshold, wherein a sum exceeding the third threshold is indicative of a voice signal.

15 2. The method as set forth in claim 1 wherein said converting step includes the steps of:

weighting each number representative of a signal; and

summing the weighted numbers.

20 3. The method as set forth in claim 2 wherein larger numbers receive greater weight than smaller numbers to produce a quasi-RMS calculation.

4. The method as set forth in claim 1 and further including the steps of:

counting the number of numbers that exceed the first threshold;

comparing the number to a fourth threshold; and

25 indicating a voice signal when the first sum exceeds the third threshold and the number exceeds the fourth threshold.

5. The method as set forth in claim 1 and further including the steps of:

counting the number of numbers that exceed the first threshold;

30 comparing the number to a fourth threshold; and

increasing the first threshold when the number is greater than the fourth threshold.

6. The method as set forth in claim 1 and further including the steps of:  
counting the number of numbers that are less than the second threshold;  
comparing the number to a fourth threshold; and  
decreasing the second threshold when the number is less than the fourth  
5 threshold.

7. The method as set forth in claim 6 and further including the step of:  
not counting the number of numbers that are less than the second threshold  
while the first sum exceeds the third threshold.

10 8. A method for analyzing the energy content of an electrical signal, said  
method comprising the steps of:

(a) defining a first voltage threshold and a second voltage threshold, wherein  
the first threshold is greater than the second threshold;  
15 (b) comparing the signal with the first voltage threshold and the second voltage  
threshold to produce a digital number representative of the signal;  
(c) repeating steps (a) and (b) to produce a plurality of numbers;  
(d) converting the plurality of numbers into a sum.

20 9. The method as set forth in claim 8 wherein said converting step includes the  
steps of:  
weighting each number representative of a signal; and  
summing the weighted numbers.

25 10. The method as set forth in claim 9 wherein larger numbers receive  
greater weight than smaller numbers to produce a quasi-RMS calculation.